

SnowEx19: Mission Objectives

THP16 Science Plan *Mission Critical* Priorities

- L-band InSAR of accumulation in dry snow
- L-band InSAR in transition from dry to wet
- Ku-band SAR in dry snow
- Ka-band InSAR to evaluate penetration in dry snow
- Coincident LiDAR for cal/val
- Integrated Modeling and Data Assimilation

THP16 Science Plan *Crucial* Priorities

- Thermal IR during dry snow
- Passive microwave in dry snow
- Spectral imaging in dry and wet snow

CONCLUSION: Government Shutdown placed 7/9 mission objectives at risk. *Delaying campaign to fall 2019 mitigated these risks to success.*

SnowEx19 Plan B is underway!

- Airborne contracts, equipment, observers onboarded **ASAP**—
improve resiliency to possible future shutdown
- Majority of funding will still be spent in FY19
- **Mid-March 2019:** Training at all 13 field locations
- **Mid-April 2019:** Shakedown overflight, 13 field teams (~70 observers)
- **November 1, 2019-May 1, 2020:** biweekly UAVSAR
- **Dec 1, 2019-May 1, 2020:** monthly ASO in CA/CO
- **Mid-January 2020:** SWESARR / Thermal IR campaign
- **Jan-Feb 2020:** 3 GLISTIN flights
- UAVSAR, GLISTIN and SWESARR/Thermal IR have confirmed availability.
ASO and CRREL plan to continue LiDAR activity in 2019-2020

Additional possible ground-based calibration/validation in support of SnowEx19

- Additional in-situ installations
- Additional field experiments
- Coordination with funded projects/efforts
- Coordination with education/outreach